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TI A process for manufacture of fiber-reinforced shaped articles
IN Gregersen, Jens Christian; Nielsen, Rasmus Stig
PA Dansk Eternit-Fabrik A/S, Den.
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CC 58-4 (Cement, Concrete, and Related Building Materials)
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	DK 8706238	A	19880529	DK 1987-6238	19871127
	DK 171916	B1	19970811		
	AT 61030	E	19910315	AT 1987-310488	19871127
	CA 1319473	A1	19930629	CA 1988-585404	19881206
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CLASS

PATENT NO.	CLASS	PATENT FAMILY CLASSIFICATION CODES
EP 263723	ICM	C04B016-02
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DK 8706238	IPCI	C04B0028-22 [ICM,4]
AT 61030	IPCI	C04B0016-02 [ICM,5]; C04B0018-24 [ICS,5]
CA 1319473	IPCI	C04B0016-02 [ICM,5]

AB The matrix-forming material of the title asbestos-free fiber-reinforced articles with d. ≥1000 kg/m3 comprises (A) a coarse material with average particle size 12-35 μ, preferably 18-25 μ with size distribution having only 1 maximum and containing a **hydraulic binder** and possible a SiO2- or silicate-containing, preferably pozzolanically active additive 40-90, preferably 45-85; (B) a fine inorg., preferably SiO2- or silicate-containing, especially pozzolanically active additive with average particle size 1-10 μ, preferably 3-7 μ with particle size distribution having only 1 maximum 5-45, preferably 10-40, in particular 10-35; (C) an ultrafine, preferably pozzolanically active additive with average particle size 0.02-1 μ, preferably <0.5 μ 3-25; and (D) other additives 0-30 dry weight%. Green, shaped articles are formed by dewatering an aqueous slurry of fibers and the matrix-forming material containing excess water over the amount necessary for curing the **hydraulic binder** in the matrix and containing cellulose fibers 3-20, preferably 5-20, in particular 7-15 dry weight% and the green articles are cured. Compns. suitable for dewatering on Hatschek and Magnani machines are claimed. Sheets prepared from a thick slurry of **bleached cellulose fibers** (length 1.0 mm, diameter .apprx.15 μ) 9, unbleached cellulose fibers (length <4 mm, diameter .apprx.35 μ) 3, low-alkali sulfate-resistant portland **cement** (90% <44 μ and 10% <3.2 μ) 47, ground fly ash (90% <30 μ, 50% <5.4 μ, and 10% <1.0 μ) 21, and SiO2 dust (average particle diameter 0.1 μ) 20% had filtration time 103 s and with autoclaving temperature 160° had modulus of rupture 20.3 MPa and d. 1399 kg/m3 vs. 41 s, 15.6 MPa, and 1284 kg/m3 with unground fly ash (90% <44 μ, 50% <14 μ, and 10% <4.4 μ) as fine component instead of ground fly ash.

ST fine ultrafine aggregate building material; cellulose fiber reinforced building material

IT Pozzolans
RL: USES (Uses)
(coarse and fine and ultrafine, in fiber-reinforced shaped building